## **Code Memorandum**

To:

Department of Buildings Plan Reviewers, Project Managers, Project Administrators and

Inspectors

From:

Judith Frydland, Commissioner

Date:

April 13, 2017

RE:

**Use of Cold Formed Steel Framing For Bearing Walls** 

In Residential Buildings of Type I Construction

The Department has recently experienced significant interest in permitting cold formed steel framing for bearing walls in multiple dwelling residential (Group A-2) and mixed occupancy buildings greater than 4 stories (Type I construction). Based on recent plan review and field inspection of such projects, the Department has identified multiple challenges in using this construction method to meet all requirements for Type I-B or I-C construction under the Chicago Building Code.

In order to facilitate use of this type of construction for larger residential buildings while still ensuring that the minimum fire safety and structural performance required by the Chicago Building Code are met, such projects will be subject to the following conditions, and require an introductory code-requirements meeting with the Commissioner or the Commissioner's designee.

- In order to ensure the adequate protection of vertical shafts, enclosures for stair enclosures required by Section 15-8-140, elevator and escalator enclosures required by Section 15-8-150, and well or chute enclosures required by Section 15-8-170 shall be constructed of masonry or concrete construction.
- In order to ensure adequate fire performance, the building shall be protected throughout by an automatic sprinkler system in conformance with Chapter 15-16.
- Because the building is protected throughout by an automatic sprinkler system, the maximum number of stories for Type I-C construction can be increased to seven stories.
- In order to qualify as Type I-B construction (required to exceed 7 stories or 80 feet), any floor which supports an interior bearing wall must also have a 3-hour rating to meet Section 13-60-120 requirements.

This memorandum applies to (a) buildings of Group A-2 (Multiple Dwelling) occupancy, including those with garage parking for use exclusively by building residents and their guests (and not available to the public); and (b) buildings of mixed occupancy where all areas above the second story are classified as Group A-2 (Multiple Dwelling) and the building does not contain any mixed occupancy classified in Group B (Institutional), C-1 (Large Assembly), C-3 (School), D (Open Air Assembly), G (Industrial), H-1 (Low Hazard Storage), H-2 (Moderate Hazard Storage), I (Hazardous), or J (Miscellaneous). This memorandum does not apply to projects which by height and area may be constructed of type II, III or IV construction.

Any deviation from these requirements requires written consent from the Commissioner.